MC 87-I-20A(P)

PRELIMINARY REPORT
INDUSTRY SERIES

1987 Census of Manufactures

MC87-I-20A(P)
Issued July 1989

MEAT PRODUCTS

Industries 2011, 2013, and 2015

INTRODUCTION

This report presents preliminary statistics from the 1987 Census of Manufactures for those establishments classified in the industries listed above. These data will be superseded by a more comprehensive final paperbound report. The method of data collection and use of administrative data are discussed in detail in the appendix.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The definitions of these industries are the same as those used in the 1987 Standard Industrial Classification (SIC) Manual.[1]

INDUSTRY 2011, MEAT PACKING PLANTS

In the 1987 Census of Manufactures, Industry 2011, Meat Packing Plants, had employment of 112.9 thousand. The employment figure was 16 percent below the 134.4 thousand reported in 1982. Compared with 1986, employment in 1987 decreased 5 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $44.9 billion.

In 1987, establishments in this industry accounted for 82 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 85 percent. The products primary to this industry appear in table 2 and aggregated to $40.7 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $39.8 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2013, SAUSAGES AND OTHER PREPARED MEATS

In the 1987 Census of Manufactures, Industry 2013, Sausages and Other Prepared Meats, had employment of 79.2 thousand. The employment figure was 21 percent above the 65.5 thousand reported in 1982. Compared with 1986, employment in 1987 increased 16 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $16.6 billion.

In 1987, establishments in this industry accounted for 71 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 61 percent. The products primary to this industry appear in table 2 and aggregated to $14.4 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $12.2 billion in 1987. Data on specific materials consumed appear in table 3.

[1] **Standard Industrial Classification Manual: 1987.** For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Address inquiries to Bureau of the Census, Industry Division, Washington, DC 20233, or call **Myrtle Lynch** (301) 763-2510.

U.S. Department of Commerce
BUREAU OF THE CENSUS

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INDUSTRY 2015, POULTRY SLAUGHTERING AND PROCESSING

In the 1987 Census of Manufactures, Industry 2015, Poultry Slaughtering and Processing, had employment of 147.1 thousand. The employment figure was 25 percent above the 117.7 thousand reported in 1982. Compared with 1986, employment in 1987 increased 13 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $14.9 billion.

In 1987, establishments in this industry accounted for 98 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). The products primary to this industry appear in table 2 and aggregated to $14.4 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $10.8 billion in 1987. Data on specific materials consumed appear in table 3.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables in this publication:

-	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
(X)	Not applicable.
(Z)	Less than half the unit shown.
do	Ditto.
n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone
Census/ASM		
Durables	Kenneth Hansen	(301) 763-7304
Nondurables	Michael Zampogna	(301) 763-2510
Current Industrial Reports		
Durables	Malcolm Bernhardt	(301) 763-2518
Nondurables	Thomas Flood	(301) 763-5911
Import/Export Publications	Foreign Trade Division	(301) 763-5140
Industry Analysis and Forecasts	International Trade Administration	(202) 377-4356

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix.]

Year[1]	Companies[2] (no.)	All establishments[3] Total (no.)	All establishments[3] With 20 employees or more (no.)	All employees Number (1,000)	All employees Payroll (million dollars)	Production workers Number (1,000)	Production workers Hours (millions)	Production workers Wages (million dollars)	Value added by manufacture[4] (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories[4] (million dollars)	Ratios Specialization (percent)	Ratios Coverage (percent)
INDUSTRY 2011, MEAT PACKING PLANTS															
1987 Census	1 341	1 446	503	112.9	2 137.2	92.8	195.7	1 016.3	5 155.6	39 809.6	44 939.0	242.0	823.0	98	[5]82
1986 ASM	(NA)	(NA)	(NA)	119.0	2 211.0	96.0	200.4	1 661.5	5 692.8	36 680.2	42 384.5	258.9	830.9	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	122.2	2 252.9	98.7	201.4	1 708.1	5 859.4	36 637.2	42 553.5	249.9	856.0	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	124.9	2 327.8	102.0	211.2	1 765.5	5 527.9	38 738.3	44 277.7	273.4	932.3	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	126.4	2 401.2	102.4	213.8	1 838.0	5 327.1	37 507.7	42 774.6	278.0	940.8	(NA)	(NA)
1982 Census	1 658	1 780	668	134.4	2 549.3	108.5	220.2	1 995.9	5 824.6	39 048.6	44 853.6	290.0	891.6	98	[5]85
1981 ASM	(NA)	(NA)	(NA)	135.3	2 585.7	108.4	225.1	2 014.5	5 292.3	39 235.8	44 570.0	330.3	908.8	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	142.9	2 553.0	114.9	238.8	1 984.4	5 260.4	37 762.5	42 962.0	299.7	996.5	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	146.5	2 419.6	117.5	241.3	1 887.4	5 156.1	38 073.1	43 191.3	234.8	964.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	147.3	2 244.1	119.5	243.3	1 747.6	4 411.1	33 963.5	38 198.7	230.9	892.5	(NA)	(NA)
1977 Census	2 403	2 590	737	146.2	2 110.6	116.5	237.2	1 625.9	4 010.1	27 239.1	31 208.2	236.7	700.1	98	[5]84
1976 ASM	(NA)	(NA)	(NA)	156.7	2 085.2	124.1	257.0	1 608.6	4 350.7	27 977.0	32 392.6	210.6	676.8	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	160.1	1 918.4	126.1	257.1	1 468.0	4 190.6	27 225.6	31 341.8	248.4	741.8	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	159.2	1 768.9	124.8	260.7	1 341.4	3 680.6	25 090.7	28 834.6	216.0	662.3	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	149.4	1 534.7	116.1	240.1	1 147.0	3 954.7	24 073.3	27 311.5	182.2	681.7	(NA)	(NA)
1972 Census	2 291	2 475	864	157.5	1 532.1	123.4	254.4	1 148.4	2 968.1	20 120.1	23 003.4	167.7	555.9	98	[5]86
INDUSTRY 2013, SAUSAGES AND OTHER PREPARED MEATS															
1987 Census	1 181	1 317	650	79.2	1 619.6	59.9	121.8	1 080.0	4 465.8	12 173.4	16 645.1	254.6	848.9	96	[5]71
1986 ASM	(NA)	(NA)	(NA)	68.5	1 327.1	52.5	104.5	908.0	3 844.5	9 524.1	13 354.2	232.4	723.7	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	64.6	1 237.2	49.4	98.3	851.4	3 705.1	8 737.3	12 405.7	210.6	685.7	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	62.9	1 185.1	48.3	95.5	816.6	3 379.4	9 003.2	12 360.8	173.2	665.3	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	65.7	1 231.9	50.1	100.3	852.6	3 072.6	9 323.5	12 365.7	157.5	642.3	(NA)	(NA)
1982 Census	1 193	1 311	613	65.5	1 206.2	49.8	98.1	851.7	2 900.9	9 379.1	12 277.5	175.5	632.9	97	[5]61
1981 ASM	(NA)	(NA)	(NA)	62.4	1 113.5	47.6	93.8	786.0	2 692.1	8 176.3	10 886.5	163.4	548.5	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	64.2	1 064.1	48.8	95.0	753.2	2 643.1	7 895.3	10 505.5	159.0	569.3	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	62.0	957.0	46.6	92.9	672.1	2 364.8	7 454.9	9 830.1	136.5	502.5	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	62.3	918.4	48.6	97.7	652.7	2 201.6	7 447.6	9 577.7	150.0	508.2	(NA)	(NA)
1977 Census	1 213	1 345	570	65.0	891.9	50.1	100.4	626.6	2 039.0	6 445.2	8 465.4	151.6	406.4	97	[5]61
1976 ASM	(NA)	(NA)	(NA)	57.6	729.5	43.4	86.1	492.6	1 688.7	5 413.6	7 098.7	110.1	332.7	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	56.1	667.8	42.3	84.5	449.0	1 538.8	5 024.7	6 582.2	96.4	327.2	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	56.7	608.8	42.7	85.8	415.3	1 069.2	4 466.5	5 842.4	90.8	310.1	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	55.6	540.9	41.4	83.5	363.8	1 131.1	4 245.1	5 349.4	54.5	269.2	(NA)	(NA)
1972 Census	1 207	1 311	557	58.1	542.2	43.5	88.2	372.2	1 099.9	3 556.0	4 632.4	74.0	221.7	97	[5]52
INDUSTRY 2015, POULTRY SLAUGHTERING AND PROCESSING[6]															
1987 Census	27[t]	455	378	147.1	1 912.8	130.9	251.9	1 553.4	4 107.5	10 817.0	14 883.2	385.8	535.5	98	98
1986 ASM	(NA)	(NA)	(NA)	129.7	1 595.3	115.4	216.4	1 299.5	3 994.4	9 555.6	13 528.9	364.2	473.1	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	116.5	1 391.9	105.0	199.7	1 145.1	3 394.8	8 803.4	12 179.0	256.0	423.9	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	112.2	1 298.5	100.5	190.6	1 067.5	2 918.6	9 024.5	11 939.4	168.2	425.1	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	116.2	1 274.4	104.4	197.5	1 042.9	2 679.3	8 571.1	11 251.6	172.7	453.9	(NA)	(NA)
1982 Census	(NA)	532	401	117.7	1 237.1	106.2	199.6	1 009.9	2 276.8	8 170.5	10 471.1	231.1	440.1	(NA)	(NA)
1981 ASM	(NA)	(NA)	(NA)	119.6	1 162.2	108.8	199.7	974.7	2 174.6	8 331.4	10 452.5	204.2	486.6	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	117.7	1 060.6	105.5	196.4	878.8	2 114.3	7 414.9	9 487.0	191.2	414.5	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	108.7	912.4	97.6	183.6	747.7	1 921.0	6 732.4	8 617.3	178.1	380.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	102.3	796.6	92.7	173.0	656.6	1 904.7	5 917.9	7 779.5	170.8	345.0	(NA)	(NA)
1977 Census	(NA)	599	408	97.9	699.1	87.5	162.2	564.4	1 428.9	5 189.7	6 602.7	144.4	273.1	(NA)	(NA)
1976 ASM	(NA)	(NA)	(NA)	97.0	658.9	85.3	159.9	519.4	1 491.2	4 861.4	6 335.7	103.3	246.6	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	92.1	574.5	81.6	152.4	453.5	1 439.5	4 427.0	5 892.7	77.5	217.7	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	96.0	567.1	85.7	164.5	453.2	1 237.1	4 130.6	5 358.3	87.1	251.5	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	96.1	519.5	87.3	167.8	431.4	1 255.0	4 069.3	5 280.7	67.3	239.9	(NA)	(NA)
1972 Census	(NA)	652	462	92.2	469.3	83.7	164.0	392.8	892.9	2 946.6	3 842.2	57.9	173.7	(NA)	(NA)

Note: Establishments of single unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. Data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were estimated based on administrative-record information from other agencies in conjunction with industry averages. These establishments accounted for the following percent of total value of shipments: SIC 2011, 7%; SIC 2013, 10%; and SIC 2015, 9%.

[1]In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the Industry chapter.

[2]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

[3]Includes establishments with payroll at any time during year.

[4]Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual surveys of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, inventories and value added by manufacture are not comparable to prior-year data.

[5]Prepared meats common to both industry 2011 and industry 2013 were included in calculating coverage ratios.

[6]Industry definition is new for 1987 Census of Manufactures. It is composed of 1982 industries 2016 and 2017.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2011- —	**FRESH AND FROZEN MEAT FROM ANIMALS SLAUGHTERED IN THIS PLANT**						
	Total	**(NA)**	**(X)**	**40 658.3**	**(NA)**	**(X)**	**40 522.6**
20111 —	Beef, not canned or made into sausage	(NA)	(X)	21 141.0	(NA)	(X)	20 606.7
20111 12	Whole carcass beef — mil lb	141	*8 727.6	7 717.1	215	10 898.0	10 397.1
20111 14	Primal cuts — do	67	847.3	1 222.8	124	1 089.4	1 206.4
20111 16	Subprimal and fabricated cuts packaged in plastics (boxed beef) — do	68	5 944.1	9 130.1	71	4 506.6	6 129.6
20111 18	Other subprimal and fabricated cuts — do	33	462.0	319.7	43	233.1	283.2
20111 31	Boneless beef, including hamburger — do	106	1 807.2	1 659.4	170	1 394.4	1 469.8
20111 51	Variety meats (edible organs) — do	66	1 053.7	526.7	104	*900.9	380.4
20111 71	Other edible beef, including corned beef — do	12	*38.8	29.6	26	*42.3	41.6
20111 00	Beef, not canned or made into sausage, n.s.k.	(NA)	(X)	535.5	(NA)	(X)	698.5
20112 —	Veal, not canned or made into sausage	(NA)	(X)	385.1	(NA)	(X)	361.1
20112 12	Whole carcass veal — mil lb	27	164.6	177.0	29	124.6	140.0
20112 17	Primal, subprimal, and fabricated cuts, and boneless veal — do	20	85.1	183.3	24	114.2	188.9
20112 61	Other edible veal, including edible organs — do	10	*12.0	13.9	11	16.7	11.3
20112 00	Veal, not canned or made into sausage, n.s.k.	(NA)	(X)	11.0	(NA)	(X)	20.9
20113 —	Lamb and mutton, not canned or made into sausage	(NA)	(X)	493.6	(NA)	(X)	270.8
20113 12	Whole carcass lamb and mutton — mil lb	18	*196.3	265.9	20	133.0	154.4
20113 52	Primal cuts and all other edible lamb and mutton — do	12	186.9	217.7	15	75.4	98.2
20113 00	Lamb and mutton, not canned or made into sausage, n.s.k.	(NA)	(X)	10.0	(NA)	(X)	18.3
20114 —	Pork, fresh and frozen	(NA)	(X)	8 292.9	(NA)	(X)	8 071.8
20114 12	Whole carcass pork — mil lb	38	1 648.0	1 221.8	42	682.2	406.6
20114 17	Primal and fabricated cuts (including trimmings) — do	107	9 357.4	6 817.1	128	7 674.6	7 189.0
20114 51	Variety meats (edible organs) — do	43	512.9	171.5	47	728.6	300.1
20114 00	Pork, fresh or frozen, n.s.k.	(NA)	(X)	82.5	(NA)	(X)	176.1
20115 —	Lard (see also code 20135)	(NA)	(X)	120.2	(NA)	(X)	239.6
20115 13	Consumer sizes (containers 3 lb or less) — mil lb	11	47.3	14.6	13	108.6	30.6
20115 17	Commercial sizes (containers more than 3 lb) — do	34	493.4	101.2	51	750.6	191.9
20115 00	Lard, n.s.k.	(NA)	(X)	4.4	(NA)	(X)	17.1
20116 —	Pork, processed or cured (not canned or made into sausage), made in meat packing plants (see also code 20136)	(NA)	(X)	2 941.7	(NA)	(X)	3 042.0
20116 12	Sweet-pickled or dry-cured pork (not smoked or cooked) — mil lb	11	47.2	73.8	11	73.5	124.2
20116 22	Dry salt pork — do	21	202.6	135.5	28	83.1	53.8
	Smoked pork (not otherwise cooked):						
20116 31	Hams and picnics, except canned — mil lb	70	791.3	1 394.0	97	887.6	1 196.5
20116 35	Slab bacon — do	32	214.6	176.0	65	106.9	116.2
20116 41	Sliced bacon — do	46	764.1	840.4	67	730.0	933.0
20116 52	Other smoked pork — do	29	46.3	51.3	42	116.5	122.9
20116 61	Boiled ham, barbecue pork, and other cooked pork, except canned meats and sausage — do	19	93.2	152.1	26	146.1	281.0
20116 00	Pork, processed or cured (not canned or made into sausage), n.s.k.	(NA)	(X)	118.5	(NA)	(X)	214.3
20117 —	Sausage and similar products (not canned), made in meat packing plants (see also code 20137)	(NA)	(X)	2 079.9	(NA)	(X)	2 867.8
20117 11	Fresh sausage (pork sausage, breakfast links, etc.) — mil lb	75	587.0	779.4	117	678.4	856.1
20117 17	Dry or semidry (salami, cervelat, pepperoni, summer sausage, pork roll, etc.) — do	20	118.0	220.0	33	143.4	293.1
20117 21	Frankfurters, including wieners — do	54	431.9	414.0	93	538.8	607.8
20117 35	Other sausage, smoked or cooked (bologna, liverwurst, Polish sausage, packaged luncheon meats, minced roll, smoked pork sausage, etc.) — do	62	477.9	531.0	95	680.1	923.4
20117 91	Jellied goods and similar preparations, not canned (headcheese, meat loaves, scrapple, puddings, chili con carne, imitation sausage, etc.) — do	17	20.4	26.8	29	50.6	49.7
20117 00	Sausage and similar products (not canned), made in meat packing plants, n.s.k.	(NA)	(X)	108.8	(NA)	(X)	137.7
20118 —	Canned meats (except dog and cat food and baby food) containing 20 percent meat or more (see also code 20138):[3]						
20118 00	Canned meats (except dog and cat food and baby food) containing 20 percent meat or more — mil lb	7	271.5	401.5	18	*393.5	658.2
20119 —	Hides, skins, and pelts	(NA)	(X)	1 610.1	(NA)	(X)	867.1
20119 14	Cattle, including kip — millions	147	39.9	1 507.8	(NA)	(D)	(D)
20119 22	Calf, except kip — do	17	**1.0	17.9	17	(D)	(D)
20119 51	Sheep and lamb — do	14	3.7	37.6	8	(S)	10.1
20119 97	Other hides, skins, and pelts, except kip — do	15	(S)	15.5	18	(S)	15.7
20119 00	Hides, skins, and pelts, n.s.k.	(NA)	(X)	31.2	(NA)	(X)	27.1
2011B —	Miscellaneous byproducts of meat packing plants	(NA)	(X)	465.3	(NA)	(X)	270.2
2011B 41	Edible tallow and stearin — mil lb	19	1 149.8	200.2	23	574.2	119.1
2011B 15	Other fresh and frozen meats including horsemeat for human consumption — do	13	112.8	93.5	9	(D)	(D)
2011B 45	Natural sausage casings (beef, hog, etc.) — do	15	*23.1	13.1	(NA)	(4)	(4)
2011B 55	Killing floor offal, scrap, bones	67	(X)	118.8	105	(X)	121.2
2011B 99	Other miscellaneous byproducts of meat packing plants, including pulled wool and glue stock (except sausage casings)	20	(X)	26.5	(NA)	(D)	(D)
2011B 00	Miscellaneous byproducts of meat packing plants, except sausage casings, n.s.k.	(NA)	(X)	13.4	-	-	-

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2011- —	**FRESH AND FROZEN MEAT FROM ANIMALS SLAUGHTERED IN THIS PLANT**—Con.						
20110 —	Fresh and frozen meats from animals slaughtered in this plant, n.s.k.	(NA)	(X)	2 726.8	(NA)	(X)	3 267.3
20110 00	Fresh and frozen meats from animals slaughtered in this plant, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	1 887.0	(NA)	(X)	2 873.3
20110 02	Fresh and frozen meats from animals slaughtered in this plant, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	839.8	(NA)	(X)	394.0
2013- —	**SAUSAGE AND OTHER PREPARED MEATS**						
	Total	**(NA)**	**(X)**	**14 385.1**	**(NA)**	**(X)**	**10 508.2**
20136 —	Pork, processed or cured, including frozen, not canned or made into sausage, not made in meat packing plants (see also code 20116)	(NA)	(X)	3 127.3	(NA)	(X)	2 278.5
20136 12	Sweet-pickled or dry-cured pork (not smoked or cooked) mil lb	15	*28.9	56.3	14	**39.5	39.9
20136 22	Dry salt pork do	15	28.4	23.2	14	25.0	31.1
	Smoked pork (not otherwise cooked):						
20136 31	Hams and picnics, except canned mil lb	111	958.6	1 296.0	99	613.7	854.6
20136 35	Slab bacon do	30	41.2	42.7	36	26.6	29.4
20136 41	Sliced bacon do	66	863.0	1 018.2	54	674.8	839.2
20136 52	Other smoked pork do	50	120.1	189.1	34	65.1	92.2
20136 61	Boiled ham, barbecue pork, and other cooked pork, except canned meats and sausages do	56	244.7	340.2	51	144.7	220.0
20136 00	Pork, processed or cured, including frozen, not canned or made into sausage, n.s.k	(NA)	(X)	161.8	(NA)	(X)	172.1
20137 —	Sausage and similar products (not canned), not made in meat packing plants (see also code 20117)	(NA)	(X)	4 956.9	(NA)	(X)	3 640.2
20137 11	Fresh sausage (pork sausage, breakfast links, etc.) mil lb	142	417.5	488.2	142	308.3	420.0
20137 17	Dry or semidry (salami, cervelat, pepperoni, summer sausage, pork roll, etc.) do	98	*494.6	989.4	89	294.6	565.1
20137 21	Frankfurters, including wieners do	139	1 076.4	1 262.2	151	821.3	950.8
20137 35	Other sausage, smoked or cooked (bologna, liverwurst, Polish sausage, packed luncheon meats, minced roll, smoked pork sausage, etc.) do	201	1 552.7	1 929.5	191	1 110.5	1 454.7
20137 91	Jellied goods and similar preparations, not canned (headcheese, meat loaves, scrapple, puddings, chili con carne, imitation sausage, etc.) do	40	*40.4	40.6	46	47.5	57.7
20137 00	Sausage and similar products (not canned), n.s.k.	(NA)	(X)	247.0	(NA)	(X)	191.9
20138 —	Canned meats (except dog and cat food and baby food) containing 20 percent meat or more, not made in meat packing plants (see also code 20118) [3]						
20138 00	Canned meats (except dog and cat food and baby food) containing 20 percent meat or more mil lb	47	*800.9	910.6	41	**753.9	890.4
2013B —	Other processed, frozen, or cooked meats (not made in meat packing plants) including collagen sausage casings	(NA)	(X)	3 836.9	(NA)	(X)	[4]1 824.6
2013B 11	Frozen ground meat patties mil lb	81	*1 265.6	1 397.8	70	*533.6	618.8
2013B 13	Frozen portion control do	52	*511.7	780.1	48	*261.1	461.9
2013B 19	Other processed, frozen, or cooked meats, corned beef, frozen primal and fabricated cuts, frozen variety meats, etc. (made from purchased meat) do	142	*976.6	1 420.7	88	*419.2	684.1
2013B 21	Collagen sausage casings do	5	(S)	63.2	(NA)	(S)	[4]59.8
2013B 00	Other processed, frozen, or cooked meats, n.s.k.	(NA)	(X)	175.0	–	–	–
20130 —	Sausage and other prepared meats, n.s.k.	(NA)	(X)	1 545.6	(NA)	(X)	1 874.4
20130 00	Sausage and other prepared meats, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	[5]1 125.3	(NA)	(X)	1 602.5
20130 02	Sausage and other prepared meats, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	420.3	(NA)	(X)	271.9
2015- —	**POULTRY AND EGG PROCESSING**						
	Total	**(NA)**	**(X)**	**14 357.6**	**(NA)**	**(X)**	**10 110.0**
20151 —	Young chickens (usually under 20 weeks of age), including broilers, fryers, roasters, and capons (including frozen, whole or parts)	(NA)	(X)	7 451.7	(NA)	(X)	6 017.4
	Broilers and fryers (usually under 20 weeks of age):						
20151 33	Wet ice pack, bulk mil lb	55	6 947.5	3 059.1	69	7 376.0	3 360.5
20151 34	Dry ice pack, bulk do	29	912.1	484.2	21	(S)	307.4
20151 36	Tray pack (consumer packaged), chilled do	31	3 356.8	2 089.7	24	2 116.2	1 220.4
20151 39	Other do	36	1 939.0	1 122.7	(NA)	667.3	384.8
20151 41	Roasters and capons, including frozen do	8	405.6	261.8	5	166.8	100.3
20151 00	Young chickens (usually under 20 weeks of age), n.s.k.	(NA)	(X)	434.1	(NA)	(X)	644.0
20152 —	Hens and/or fowl (including frozen, whole or parts)	(NA)	(X)	210.7	(NA)	(X)	175.6
20152 21	Egg producing type mil lb	17	350.1	137.8	17	354.9	118.2
20152 23	Breeder type do	11	(S)	64.3	14	73.6	26.5
20152 00	Hens and/or fowl (including frozen, whole or parts), n.s.k.	(NA)	(X)	8.6	(NA)	(X)	30.9
20153 —	Turkeys (including frozen, whole or parts)	(NA)	(X)	1 644.6	(NA)	(X)	1 272.4
20153 22	Fryer-roaster turkeys (usually under 16 weeks of age), whole mil lb	7	[6]	[6]	11	[7]116.0	[7]96.9
20153 24	Young turkeys (mature) (usually 4 to 7 months of age), whole do	30	1 333.8	[7]68.9	(NA)	[7]1 466.2	[7]893.2
20153 26	Old turkeys (breeders) (usually over 12 months of age), whole do	11	140.1	75.5	14	[7]*22.7	[7]15.4
20153 27	Turkey parts, including ground turkey, turkey cutlets, etc. do	23	797.1	572.4	[7]	[7]	[7]

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2015– —	**POULTRY AND EGG PROCESSING**—Con.						
20153 —	Turkeys (including frozen, whole or parts)—Con.						
20153 00	Turkeys (including frozen, whole or parts), n.s.k.	(NA)	(X)	[6]227.8	(NA)	(X)	266.9
20154 —	Other poultry and small game (including frozen, whole or parts)	(NA)	(X)	86.7	(NA)	(X)	58.9
20154 14	Ducks, mil lb	5	80.2	48.2	7	62.0	47.0
20154 16	Other poultry and small game (geese, rabbits, etc.), do	6	(S)	37.6	6	4.4	8.0
20154 00	Other poultry and small game (including frozen, whole or parts), n.s.k.	(NA)	(X)	9	(NA)	(X)	3.9
20155 —	Processed poultry and small game (except soups) containing 20 percent or more poultry or small game[3]	(NA)	(X)	3 725.3	(NA)	(X)	1 692.3
	Canned poultry:						
20155 11	10 oz or less, 1,000 cases/48	2	(D)	(D)	(NA)	989.0	21.0
20155 13	40.1 oz to 60 oz, 1,000 cases/12	3	(D)	(D)	(NA)	432.6	13.1
20155 15	Other sizes	4	(X)	14.9	(NA)	(S)	17.2
	Cooked or smoked poultry, including frozen:						
20155 31	Turkey, except frankfurters, hams, and luncheon meats, mil lb	21	*599.3	865.6	(NA)	*310.5	351.0
20155 32	Chicken, except frankfurters, hams, and luncheon meats, do	39	1 009.0	1 391.9	(NA)	617.2	644.3
20155 33	Frankfurters, including wieners, do	50	(S)	215.2	(NA)	151.7	98.5
20155 34	Hams and luncheon meats, do	58	531.1	657.9	(NA)	196.0	279.5
20155 39	Other, do	8	(X)	57.7	(NA)	(X)	48.9
20155 48	Other processed poultry and small game (dehydrated, raw-boned, etc.), except frozen	23	(X)	365.7	(NA)	(X)	86.6
20155 00	Processed poultry and small game (except soups) containing 20 percent or more poultry or small game, n.s.k.	(NA)	(X)	105.7	(NA)	(X)	132.1
20159 —	Liquid, dried, and frozen eggs	(NA)	(X)	495.4	(NA)	(X)	329.7
	Eggs, dried:						
20159 11	Whites, mil lb	12	**21.8	44.5	8	*20.1	30.0
20159 13	Yolks, do	9	16.9	24.5	9	*12.1	21.6
20159 15	Whole, do	11	19.6	28.1	10	**16.3	21.8
20159 17	Mixed, do	9	(S)	28.9	8	(S)	22.2
	Eggs, frozen or liquid:						
20159 51	Whites, mil lb	21	129.1	135.0	19	*80.7	13.7
20159 53	Yolks, do	20	88.1	47.0	23	73.5	48.7
20159 55	Whole, do	25	195.8	94.4	28	(S)	96.7
20159 57	Mixed, do	15	128.7	62.3	13	80.6	34.7
20159 00	Liquid, dried, and frozen eggs, n.s.k.	(NA)	(X)	30.6	(NA)	(X)	40.3
20150 —	Poultry and egg processsing, n.s.k.	(NA)	(X)	743.3	(NA)	(X)	563.7
20150 00	Poultry and egg processing, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	597.1	(NA)	(X)	529.5
20150 02	Poultry and egg processing, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	60.9	(NA)	(X)	34.2

Note: In 1987 Census of Manufactures, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

[1]Data reported by all producers, not just those with shipments of $100,000 or more.
[2]For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).
[3]Canned meat products containing less than 20 percent meat are included in Industry 2032, Canned Specialties.
[4]For 1982, data for product code 2013521 include data for natural and collagen sausage casings. For 1987, data for natural sausage casings are shown under product code 2011B45.
[5]For 1987, product code 2013000 included $7.8 million of lard.
[6]For 1987, data for product code 2015322 are included with product code 2015300.
[7]For 1982, data for product code 2015327, turkey parts, were not collected separately but were included with product codes 2015322, 2015324, and 2015326.
[8]Canned poultry products containing less than 20 percent poultry are included in industry 2032, Canned Specialties.

Table 3. Materials Consumed by Kind: 1987 and 1982

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987			1982		
		Number of head (1,000)	Quantity[1] (million pounds)	Delivered cost (million dollars)	Number of head (1,000)	Quantity[1] (million pounds)	Delivered cost (million dollars)
	INDUSTRY 2011, MEAT PACKING PLANTS						
	Materials, ingredients, containers, and supplies	**(X)**	**(X)**	**36 121.0**	**(X)**	**(X)**	**35 659.8**
021013	Cattle	30 408.0	32 150.0	20 199.7	32 945.7	34 358.4	18 107.0
021023	Calves	1 565.3	401.7	329.4	1 938.5	476.3	327.6
021313	Hogs	75 088.2	18 374.6	9 219.1	70 449.1	17 104.9	9 225.8
021413	Sheep and lambs	3 744.2	437.3	350.1	3 763.7	417.7	219.8
	Fresh and frozen red meats:						
201111	Beef	(X)	**463.1	416.7	(X)	(S)	1 215.5
201121	Veal	(X)	42.1	54.1	(X)	(S)	2.9
201141	Pork	(X)	892.3	679.2	(X)	801.0	704.9
201132	Other fresh and frozen red meats	(X)	4.6	4.6	(X)	(S)	15.6
201101	Meat materials for sausage and canning, not separable by species	(X)	*261.3	185.8	(X)	**462.9	318.2
201161	Processed pork (cured, smoked, etc.)	(X)	631.0	405.4	(X)	255.1	222.7
201102	Other purchased meat materials (cured beef, cured lamb, etc.)	(X)	46.8	44.0	(X)	(S)	7.4
190032	Poultry: live, fresh, frozen, or prepared	(X)	(X)	25.5	(X)	(X)	18.0
201191	Hides, skins, and pelts purchased	(X)	(X)	49.3	(X)	(X)	86.1
209993	Spices and curing materials	(X)	(X)	66.6	(X)	(X)	74.3
	Casings:						
201391	Animal and collagen casings purchased	(X)	(X)	19.9	(X)	(X)	29.6
308012	Synthetic including cellulosic and fibrous reinforced	(X)	(X)	34.4	(X)	(X)	74.0
970099	All other materials, ingredients, containers, and supplies	(X)	(X)	965.7	(X)	(X)	942.6
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	(X)	(X)	3 071.5	(X)	(X)	4 067.8

1987 material code	Material	1987		1982	
		Quantity[1]	Delivered cost (million dollars)	Quantity[1]	Delivered cost (million dollars)
	INDUSTRY 2013, SAUSAGES AND OTHER PREPARED MEATS				
	Materials, ingredients, containers, and supplies	**(X)**	**10 380.3**	**(X)**	**7 903.0**
	Fresh and frozen red meats:				
201111	Beef, mil lb	*3 549.4	3 302.6	*2 357.7	2 157.3
201121	Veal, do	(S)	106.0	(S)	79.7
201141	Pork, do	3 824.8	3 121.4	*2 603.9	2 228.9
201132	Other fresh and frozen red meats, do	**101.2	67.2	*40.0	34.2
201101	Meat materials for sausage and canning, not separable by species, do	(S)	648.3	**491.5	381.5
201161	Processed pork (cured, smoked, etc.), do	(S)	146.4	239.1	237.3
201102	Other purchased meat materials (cured beef, cured lamb, etc.), do	**128.9	83.4	*34.8	45.1
190032	Poultry: live, fresh, frozen, or prepared	(X)	160.0	(X)	89.4
209993	Spices and curing materials	(X)	169.1	(X)	122.4
	Casings:				
201391	Animal and collagen casings purchased	(X)	64.2	(X)	44.4
308012	Synthetic including cellulosic and fibrous reinforced	(X)	138.4	(X)	103.1
970099	All other materials, ingredients, containers, and supplies	(X)	728.7	(X)	651.6
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	(X)	1 644.6	(X)	1 728.1
	INDUSTRY 2015, POULTRY SLAUGHTERING AND PROCESSING				
	Materials, ingredients, containers, and supplies	**(X)**	**10 158.4**	**(X)**	**7 668.5**
	Poultry and small game slaughtered:				
025111	Young chickens, including broilers, live wt mil lb	16 530.5	4 409.7	*12 245.1	3 790.5
025121	Hens (or fowl) and other chickens, do	747.8	114.8	938.2	155.8
025311	Turkeys, do	3 787.5	1 356.7	*2 064.1	871.6
025911	Other poultry and small game, including ducks, geese, rabbits, etc.	(X)	42.2	(X)	30.0
	Other materials used:				
201501	Dressed poultry purchased as such, dressed wt mil lb	**2 355.4	1 542.5	1 001.0	544.8
025211	Shell eggs, 1,000 cases (30 doz)	(S)	215.8	(S)	191.9
970099	All other materials, ingredients, containers, packaging materials, and supplies	(X)	1 298.6	(X)	642.4
971000	Materials, ingredients, containers, and supplies, n.s.k.[2]	(X)	1 178.1	(X)	1 441.5

[1]For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

[2]Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

APPENDIX
Scope and Coverage and Explanation of Terms

GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. For 1987, it was conducted as part of the economic censuses, which included the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses, under authority of title 13 of the United States Code. Title 13 specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

SCOPE AND COVERAGE

Establishment Basis of Reporting

The census of manufactures is conducted on an establishment basis. All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which service manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

Use of Administrative Records

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishment whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

EXPLANATION OF TERMS

Number of establishments and companies–A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

All employees–Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

Production workers–Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

Other employees–Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and

servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

Payroll–Includes the gross earnings for the "employees" defined above, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

Production-worker hours–Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

Cost of materials–Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

Specific materials consumed (table 3)–In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Establishments consuming less than a specified amount (usually $10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as "not specified by kind" (n.s.k.).

Value of shipments and other receipts–Generally refers to received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead and profit).

Shipments or production of individual products (table 2)–In the 1987 census, detailed shipment information was collected for approximately 11,000 individual products. These products are identified by a seven-digit code and are grouped into approximately 1,500 classes of products, which in turn are primary to 459 four-digit industries. Data at the five-digit product-class level have been collected each year as part of the annual survey of manufactures. Information at the seven-digit level, collected for many industries in the current industrial reports program, is not included in this table.

Value added by manufacture–This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value

added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

Expenditures for new plant and equipment–Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expenses. Data for used plant and equipment will be published in the final industry bulletin.

End-of-year inventories–Comprised of (a) finished products; (b) work-in-process; and (c) materials, supplies, fuels, etc. Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Therefore, 1982 through 1987 data for inventories are not strictly comparable to prior-year data.

Specialization and coverage ratios–An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishments' shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

Specialization ratio–Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio–Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.